

ABSTRACT OF THE DISCLOSURE

A tape optical fiber cord with an optical fiber array has, at its one end, a half pitch fiber array connected to an optical waveguide. Connectors are connected respectively to connector-side optical fibers located at the other end of the tape optical fiber cord. A branching case for branching the connector-side optical fibers is provided in a position between both ends of the cord. One end of a tape fiber comprising tapes arranged in two columns of two stages is fixed to the half pitch fiber array, and the other end is fixed in a fixation section within the branching case to the case. In the portion intermediate between the two fixed portions, the connector-side optical fibers are separated one by one, and the outside of the separated optical fibers is covered with a protective tube while leaving a space between the protective tube and the separated optical fibers. By virtue of the above construction, the tape optical fiber cord with an optical fiber array can minimize the occurrence of microbends in a local portion of the optical fibers even when a portion between both ends of a tape, in which a plurality of optical fibers have been arranged, has been bent, because the optical fibers are deformed independently of one another upon the application of external force and, thus, any excessive stress is not applied to the optical fibers.